A COLLABORATIVE ASSESSMENT OF FALLS IN MISSOURI

Includes a side-by-side comparison of currently available, top-rated Fall toolkits.

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ABOUT THE CENTER FOR PATIENT SAFETY

The Center for Patient Safety is certified as a federally-designated Patient Safety Organization (PSO) in compliance with provisions of the federal Patient Safety and Quality Improvement Act of 2005 (PSQIA). PSOs support the collection, analysis, sharing and learning about what medical errors occur, why and how to prevent them. By reinforcing a safety culture that encourages and allows healthcare providers to safely report and share information about vulnerabilities within the healthcare system, PSOs are pivotal in the crusade to prevent medical errors and patient harm.

The Center for Patient Safety provides PSO services for hospitals, health systems, medical offices, long-term care facilities, ambulatory surgery centers and emergency medical services. For more information about PSOs and safety culture services, contact the Center for Patient Safety at info@centerforpatientsafety.org.

IMPORTANT NOTE

The data contained in this report is from the Center for Patient Safety's PSO database. Licensed healthcare providers may participate in a PSO in order to share information, learn from the sharing, gain federal protection to support open reporting and ultimately reduce mistakes and patient harm. PSO participation is voluntary and organizations may choose to submit most or all adverse events or they may choose to submit only the more severe adverse events to share lessons learned. The event types and their severities, along with additional information, contained in this report are deidentified as required by the PSQIA.

The goal of data sharing is to present findings within the events reported to the Center's PSO, learn how and why events are occurring, and inform providers and others about how to prevent future occurrences.

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Executive Summary

Despite the multitude of toolkits and resources available, falls still remain a prevalent safety issue. Over the past three years, falls have consistently been in the top five reported sentinel events. In 2013, falls were the fifth most commonly reported sentinel event, rising to the second most reported event in 2014.

Currently falls are the fourth most reported event through the third quarter of 2015. This is concerning for two reasons:

(1) Falls are an avoidable injury to the patient;

(2) Financial risk is imposed on the facility due to increased lengths of stay and the costs to treat the injury from the fall.

The Missouri Hospital Association and the Center for Patient Safety began a collaborative effort in the summer of 2015 to review claims data and patient safety event data to determine if Missouri was aligned with the national landscape trend of an increasing number of fall events.

As this collaboration was occurring, The Joint Commission issued Sentinel Alert Event (SEA) #55 on September 28, 2015. This alert highlighted the fact that fall prevention is a complicated process involving many moving parts.

The Missouri Hospital Association utilized Hospital Industry Data Institute (HIDI) Analytics to pull claims data pertaining to falls and trauma-related harm in the state of Missouri. HIDI data was reviewed for events occurring from October 1, 2013, to March 31, 2015, while the Center for Patient Safety analyzed fall-related events submitted for the same period. The Sentinel Event (SEA #55) noted an increase in the reporting of falls and the research done in Missouri noted a similar trend.

This report will highlight issues noted, contributing factors, review resources and evaluate the toolkits mentioned in SEA #55.

The goal of this report is to provide an analysis that outlines common causal factors and risks that result in falls with harm to the patient. Additionally, guidance will be provided to assist in the evaluation and implementation of the most appropriate, and most effective, fall program within a facility.

TIMEFRAME REVIEWED

10/1/2013 - 03/31/2015

INTENT OF DOCUMENT

- Aggregate and analyze multiple areas of fall data from hospitals in Missouri
- Determine causal factors
- Provide lessons learned to prevent future falls

The Joint Commission issued Sentinel Event Alert #55 (SEA 55) on September 28, 2015
The alert highlights the complexities of fall prevention.

Highlights from SEA #55 include:

- Every year hundreds of thousands of patients fall in hospital with injury resulting in 30-50% of them.
- Injuries from falls can add an additional 6.3 days to the hospital stay.
- The cost of one fall with injury is approximately $14,000.

Other issues of interest include the following most common causal factors:

- Inadequate assessment
- Communication failures
- Lack of adherence to protocols and safety practices
- Inadequate staff orientation, supervision, staffing levels or skill mix
- Deficiencies in the physical environment

Data Review

In reviewing claims data, as pulled from HIDI for the time frame of October 1, 2013 to March 31, 2015, it was noted that there is an upward trend in falls with injuries (Graph 1).

In reviewing Process data (Was a fall risk assessment completed?) it is interesting to note that nearly 100% of the organizations indicated they were completing a fall risk assessment. However, despite completing a fall risk assessment, many facilities were still experiencing falls with injuries.

This fact raises several questions:

- Is the fall risk assessment tool appropriate for the organization?
- Is the staff trained in accurate and appropriate utilization?
- Is the tool designed to assess the patient population, or clientele, accurately?

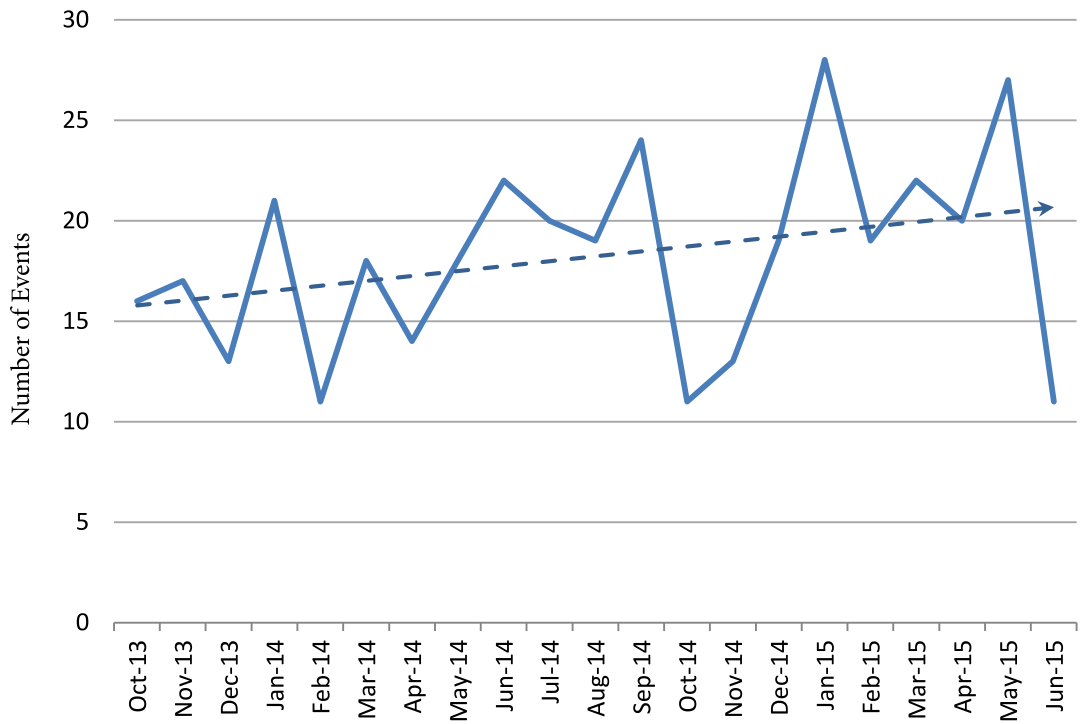
Going deeper, an analysis of falls events submitted to the Center for Patient Safety highlighted specific patient groups at increased risk; medication events associated with increased risk; activities prior to the fall which could place a patient at increased risk; and also organizational processes which could play a factor.

These events are broken down into harm level and then broken down by age group, allowing a quick high level overview of the at-risk population.

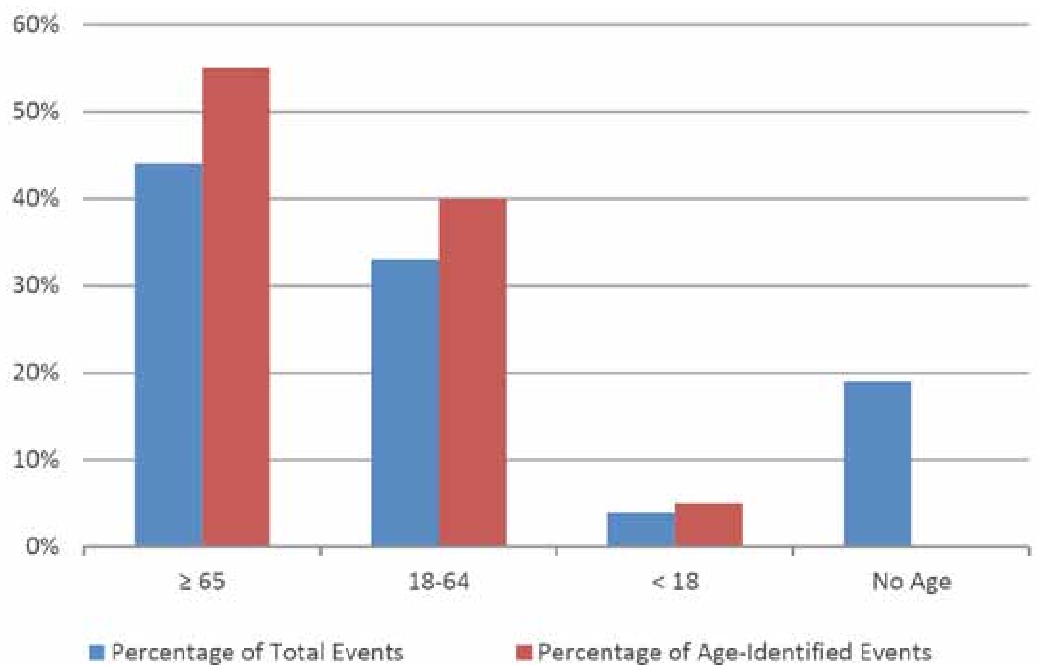
Overview of Patient Safety Events

- 606 falls with harm
- 493 events identified age
- Death/Severe Harm: 24
- Moderate Harm: 88
- Mild Harm: 494

GRAPH 1.
Trend Analysis Showing Falls & Trauma Related Harm in Missouri



GRAPH 2.
Age Breakdown of All Events



Data Review

DEATH/SEVERE HARM

The term “Never Event” was first used in 2001 to reference those medical errors that should never happen. As of 2011 there are 29 such events defined. The “Never Event” associated with falls is defined by the National Quality Forum as “Patient death or serious injury associated with a fall while be cared for in a health care setting.

The AHRQ Common Formats Harm Scale Version 1.2 defines ‘Severe Harm’ as bodily or psychological injury (including pain/disfigurement) that interferes significantly with functional ability or quality of life.

Data submitted to the Center for Patient Safety consisted of 24 such events.

Injury Details

- Fracture
- Intracranial Injury
- Dislocation

Risk Factors

- 65+
- Confusion/Sensory Impairment
- Post-op/Post-procedure
- History of previous fall
- Medication
- Handoff

MODERATE HARM

AHRQ Common Formats Harm Scale Version 1.2 defines ‘Moderate Harm’ as bodily or psychological injury adversely affecting functional ability or quality of life, but not at the level of severe harm.

88 such events were reported in the time frame reviewed.

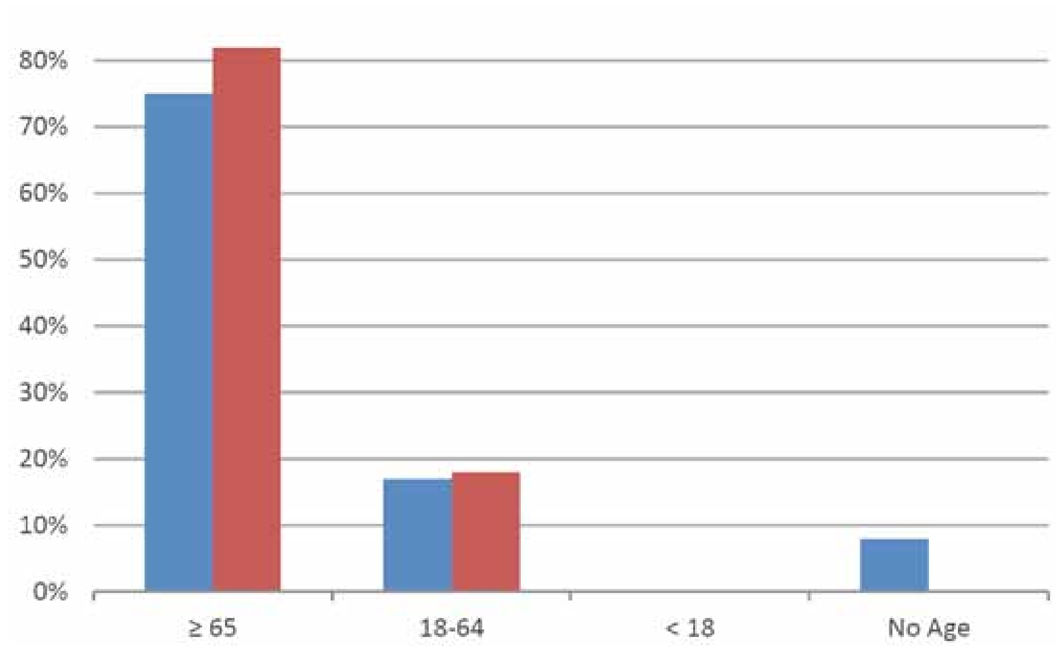
Injury Details

- Fracture
- Intracranial Injury
- Dislocation

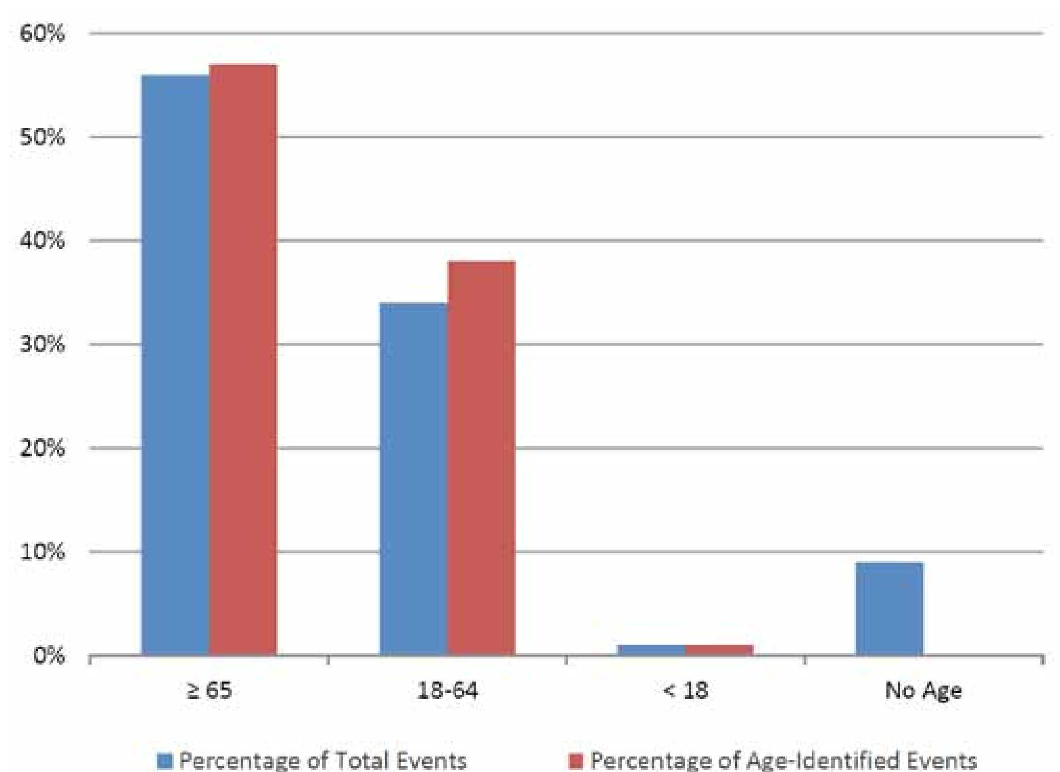
Risk Factors

- 65+
- Confusion/Sensory Impairment
- Post-op/Post-procedure
- History of previous fall
- Medication
- Handoff

GRAPH 3.
Age Breakdown of “Never” Events



GRAPH 4.
Age Breakdown of Moderate Harm



Data Review

MILD HARM

AHRQ Common Formats Harm Scale Version 1.2 defines 'Mild Harm' as 'Minimal symptoms or loss of function, or injury limited to additional treatment, monitoring, and/or increased length of stay.'

494 such events were reported in the time frame reviewed.

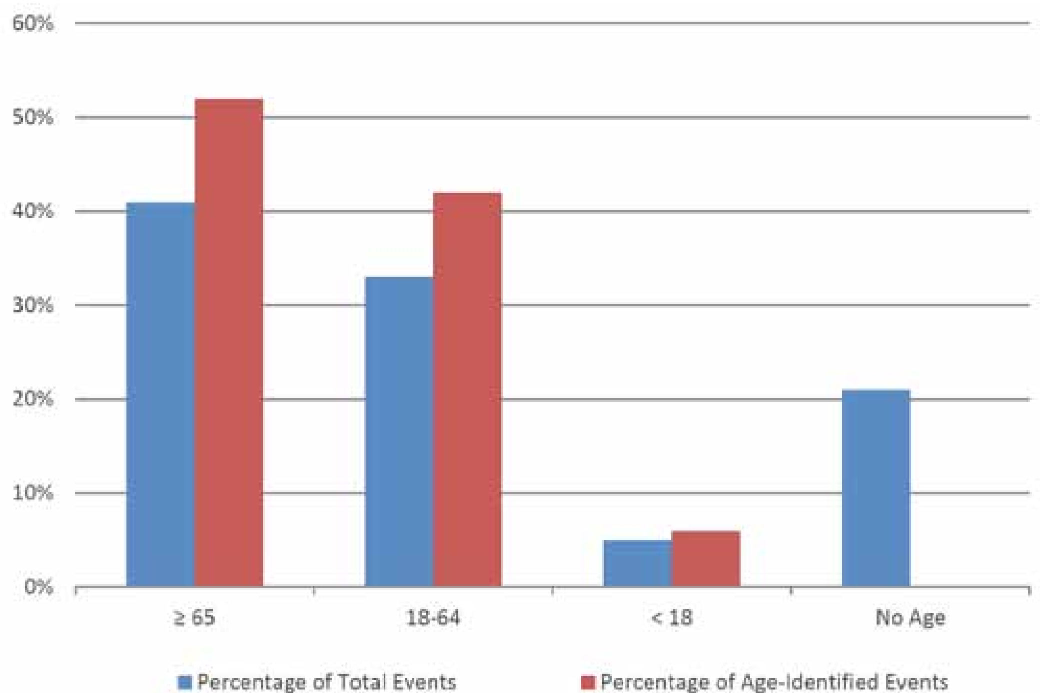
Injury Details

- Fracture
- Intracranial Injury
- Dislocation
- Laceration requiring sutures
- Hematoma/abrasion

Risk Factors

- 65+
- Confusion
- Post-op/Post-procedure
- History of previous fall
- Medication

GRAPH 5.
Age Breakdown of Mild Harm



Lessons Learned

Analysis of the data shows that despite the utilization of fall risk assessment tools, falls, and "Never Events" are still occurring in Missouri and are trending upward. There are a multitude of factors associated with these falls, and there are lessons learned which can be reviewed and evaluated in organizations.

CONTRIBUTING FACTORS

Age**.** Those greater than 65 have a greater risk, though being under 65 does not necessarily mean a person is not at risk for a fall.

Medication. There are many medications which increase a person's risk for fall and multiple new medications are coming out every year.

Confusion/Dementia. Confusion regarding orientation/location and capability commonly is associated with falls.

Surgery/Procedures. Anesthesia contributes to confusion.

Handoffs. Lack of communication increases risk of falls

History of previous fall.

LESSONS LEARNED

Lessons learned from the CPS data not only echo those listed in SEA #55 but also point to additional factors:

- Not completing a fall risk assessment/completing incorrectly
- Transitions/Handoffs
- Lack of education/new staff
- Physical environment layout
- Alarm fatigue
- Toileting activity prior to fall
- Behavioral health factors

The data reveals an urgent need to review the processes/policies an organization has in place to prevent falls and also the processes in place to review a fall after it occurs. What is missing in the data is a review or root cause analysis of the falls. This lack of review or RCA's leaves a gap in learning. Research has shown that RCAs and reviews of fall events can help an organization decrease their falls rates. In a study funded by AHRQ (Ruddick, et. al., 2006) it was noted that completing an RCA helped to reduce falls rates by 45%. Completion of an RCA and submission to a PSO assists with learning contributing factors and can aid a PSO with identifying trends, lessons to be learned that can be shared with organizations to improve patient safety and quality of care.

Next Steps

While SEA #55 mentioned several key components to put in place to help reduce and assess falls, the first step should be to assess your organization's patient safety culture. Healthcare has realized that it needs to develop into a high reliability organization (HRO) and a positive patient safety culture is a first step toward that development. In fact, it is nearly impossible to separate the concepts of an HRO from the components involved with a safe culture (Quigley and White, 2013).

The Agency for Healthcare Research and Quality (AHRQ) has identified seven elements which contribute to a strong patient safety culture which can also help reduce falls (Quigley and White, 2013):

- Leadership
- Engagement of front line clinical staff
- Multidisciplinary committees
- Pilot test of interventions
- Information technology system for data collection and management
- Changing the prevailing attitude that "falls are inevitable"
- Adequate time for education and training

These elements combined with those mentioned in SEA #55 provide a framework with which to begin assessing your organization's fall risk assessment tool and fall policy.

The tools and resources listed in SEA #55 provide some of the most complete toolkits developed through research. However, none of these toolkits are a one size fits all. Each must be evaluated and adjusted to fit within an organization, beginning with the fall risk assessment.

Each of these toolkits strongly encourages the use of a standardized fall risk assessment which fits within the organization. While there is no consensus as to a single best tools, the two most strongly suggested are the Morse and STRATIFY fall risk assessments, followed by the Hendrich fall risk assessment. All of these fall toolkits also state that routine utilization of a fall risk assessment tool can help identify patients at risk for a fall. However, it is also emphasized that the fall risk assessment tools must be utilized appropriately and that staff needs to be trained and educated in the use of them to ensure they are used correctly and consistently.

Another fall risk assessment tool which just recently came out in the literature is the Falls Wheel. This is a visual communication tool used to identify all patients' risk of fall with injury. Early evaluation of this tool shows an almost fifty percent decrease in the rate of falls with harm. However, it is emphasized to not use this tool as a stand alone fall prevention tool but rather in conjunction with a falls prevention toolkit (Hefner, McAlearney, Mansfield, Knupp & Moffat-Bruce, 2015).

The decision on which toolkit to utilize can be a daunting task and also very time-consuming. In 2015 the Missouri Hospital Association put together a Falls Prevention Toolkit which highlights key strategies for streamlining communication, engaging patients/families and promoting interdisciplinary involvement in a falls prevention program. The tables on the following pages highlight many of the features of the identified toolkits in SEA #55.

The information contained in the tables does not replace an in-depth review but rather provides highlights of the tools and their resources. The information should be used as a starting point when selecting an appropriate falls prevention program to implement at any organization.

Table 1: Comparison, Fall Toolkit Overview

Organization (Alphabetical Order)	AHRQ Agency for Healthcare Research & Quality	ECRI Institute	ICSI Institute for Clinical Systems Improvement	IHI Institute for Healthcare Improvement	Joint Commission	VA National Center for Patient Safety
Toolkit Name	Preventing Falls in Hospitals	Falls	Prevention of Falls	Reducing Patient Injuries from Falls	Preventing Falls Targeted Solutions Tool	Implementation Guide for Fall Injury Reduction
Healthcare Organization Type	Hospital/ Acute Care	Across Continuum	Hospital/ Acute Care	Hospital/ Acute Care	Hospital/ Acute Care	Hospital/ Acute Care
Date Revised	2013	2009	2012	2012	2013	2013
Cost	Free	Framework document free	Free	Free	Free to accredited members	Free
Available online	Yes	Yes	Yes	Yes	Yes	Yes
Bulleted or outlined framework provided	Yes	Yes	Yes	Yes	Yes	Yes
Multiple Tools Provided	Yes	Yes, to HRC members only	Yes, available to members	Yes	Yes, available to members	Yes
Bibliography/research articles/ links provided	Yes	Yes	Yes	Yes	Yes	Yes
Can the tool be utilized in an EHR or a web-based tool	Yes	Unable to assess	Yes	Yes	Yes	Yes

Table 2: Comparison, Fall Toolkit Inclusions

Organization (Alphabetical Order)	AHRQ Agency for Healthcare Research & Quality	ECRI Institute	ICSI Institute for Clinical Systems Improvement	IHI Institute for Healthcare Improvement	Joint Commission	VA National Center for Patient Safety
Toolkit Name	Preventing Falls in Hospitals	Falls	Prevention of Falls	Reducing Patient Injuries from Falls	Preventing Falls Targeted Solutions Tool	Implementation Guide for Fall Injury Reduction
Healthcare Organization Type	Hospital/ Acute Care	Across Continuum	Hospital/ Acute Care	Hospital/ Acute Care	Hospital/ Acute Care	Hospital/ Acute Care
Patient Safety Culture Survey, Readiness Assessment & Checklist	Yes	Yes*	Yes*	No	No[4]	No
Measures Definition Utilized	NDNQI	Yes*	Yes*	NDNQI	NDNQI	VA NCPS
Leadership/Staff Roles & Education Tool	Yes	Yes*	Yes*	No[1]	Yes	Yes
Current Process Analysis Tool	Yes	Yes*	Yes*	No	Yes	Yes
Fall Knowledge Assessment	Yes	Yes*	Yes*	No	Yes	No
Environmental Assessment	Yes	Yes*	Yes*	Yes	Yes	Yes[6]
Scheduled Rounding	Yes	Yes*	Yes*	Yes	Yes	No
Standardized Fall Risk Assessment Tool	Yes	Yes*	Yes*	Yes	Yes	Yes
Medication Evaluation	Yes	Yes*	Yes*	No[2]	No[5]	No
Dementia/Delirium Assessment	Yes	Yes*	Yes*	No[3]	No	No
Post-fall RCA/Huddle or Review	Yes	Yes*	Yes*	Yes	Yes	Yes
Best Practices Checklist	Yes	Yes*	Yes*	Yes	Yes	Yes
Progress Assessment	Yes	Yes*	Yes*	Yes	Yes	No
Sustainability Tool	Yes	Yes*	Yes*	Yes - PDSA	Yes	No

NOTES*
*Available to members
1. No tool, recommends leadership involvement
2. No tool, recommends evaluating all medications
3. No tool, recommends evaluation
4. SOPS not part of toolkit, but noted that change can't take place without strong culture.
5. No specific tool, but recommends evaluating all medication taken within two (2) hours of fall.
6. There are tools specific to hip protectors and fall mats for bedside

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